

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Withdrawn) A method for executing an operation in a pressure vessel of a nuclear reactor, comprising:

inserting a body of an operation apparatus having a guide at a lower portion into the pressure vessel;

providing an incline of the guide with respect to a vertical axis while inserting the guide into an opening of a pump in the pressure vessel; and

after inserting the guide, inserting at least a portion of the body into an interior of the pump.

2. (Withdrawn) A method for executing an operation in a pressure vessel of a nuclear reactor according to claim 1 wherein,

providing an incline of the guide includes adjusting an angle of incline of the guide to an appropriate angle.

3. (Withdrawn) A method for executing an operation in a pressure vessel of a nuclear reactor according to claim 1 further comprising:

after inserting at least a portion of the body, adjusting an angle of the guide; and

after adjusting an angle of the guide, performing an operation with a tool at a lower portion of the body.

4. (Withdrawn) A method for executing an operation in a pressure vessel of a nuclear reactor according to claim 1 further comprising:

after inserting at least a portion of the body, adjusting an angle of the guide; and

after adjusting an angle of the guide, performing an operation with guide as a tool of the operation.

5. (Withdrawn) A method for executing an operation in a pressure vessel of a nuclear reactor according to claim 1 further comprising:

after inserting at least a portion of the body, pivoting a tool at a lower portion of the body about the vertical axis; and

after pivoting a tool, performing an operation with the tool.

6. (Withdrawn) A method for executing an operation in a pressure vessel of a nuclear reactor according to claim 1 further comprising:

after inserting at least a portion of the body, adjusting an angle of a tool at a lower portion of the body with respect to the vertical axis;

after adjusting an angle of a tool, performing an operation with the tool.

7. (Withdrawn) A method for an execution of an operation in a pressure vessel of a nuclear reactor according to claim 1 further comprising:

permitting the force of gravity on the guide to draw the body into the interior of the pump.

8. (Withdrawn) A method for executing an operation in a pressure vessel of a nuclear reactor according to claim 1 further comprising:

after inserting at least a portion of the body, extending a first plurality supports attached to the body; and

stabilizing the first plurality of supports against a first plurality of interior surfaces of the pump.

9. (Withdrawn) A method for executing an operation in a pressure vessel of a nuclear reactor according to claim 7 further comprising:

after inserting at least a portion of the body, extending a second plurality of supports attached to the body; and

stabilizing the second plurality of supports against a second plurality of interior surfaces of the pump below the first plurality of interior surfaces.

10. (Withdrawn) A method for executing an operation in a pressure vessel of a nuclear reactor according to claim 1 further comprising:

after inserting at least a portion of the body, restoring the guide to an original position with respect to the body.

11. (Currently Amended) An apparatus for executing an operation in a vessel of a nuclear reactor, comprising:

a fully-immersionable body capable of being suspended and lowered into the vessel during the operation;

a tool attached to the body for at least one of repairing and inspecting an interior of a pump in the vessel;

a guide having an inclined surface with respect to a vertical axis of the body when the body is suspended, wherein the guide is movably supported at a lower portion of the body so that the inclined surface of the guide is first inserted into the pump when the body is suspended and lowered into the vessel to adaptively vary the orientation of the guide in order to correspond to an interior surface of the pump as insertion proceeds.

12. (Previously Presented) An apparatus for executing an operation in a vessel of nuclear reactor according to claim 11,

wherein the guide includes at least one of a guide rod and a guide surface inclined at a predetermined angle with respect to the vertical axis.

13. (Previously Presented) An apparatus for executing an operation in a vessel of a nuclear reactor according to claim 11,

wherein the guide is freely supported at the lower portion of the body and inclined at a predetermined angle with respect to the vertical axis due to gravitational force.

14. (Previously Presented) An apparatus for executing an operation in a vessel of a nuclear reactor according to claim 11,

wherein the guide is biased to return to a predetermined angle with respect to the body.

15. (Withdrawn) An apparatus for executing an operation in a vessel of a nuclear reactor according to claim 11,

wherein an angle between the guide and the body is adjustable.

16. (Withdrawn) An apparatus for executing an operation in a vessel of a nuclear reactor according to claim 11,
wherein the tool commonly serves as the guide.

17. (Withdrawn) An apparatus for executing an operation in a vessel of a nuclear reactor according to claim 11, wherein the body includes:

at least 3 members interconnected by joints, at least one of the joints being at least one of a rotational joint and a bending joint; and
a plurality of extendable supports capable of stabilizing the body against a first plurality of interior surfaces of the pump.

18. (Withdrawn) An apparatus for executing an operation in a vessel of a nuclear reactor according to claim 11 further comprising:

a first plurality of extendable supports attached to the body and capable of stabilizing the body against a first plurality of interior surfaces of the pump.

19. (Withdrawn) An apparatus for executing an operation in a vessel of a nuclear reactor according to claim 18 further comprising:

a second plurality of extendable supports attached to the body and capable of stabilizing the body against a second plurality of interior surfaces of the pump.

20. (Withdrawn) An apparatus for executing an operation in a vessel of a nuclear reactor according to claim 11 wherein,

the body includes a plurality of joints, the joints including a joint that rotates around the vertical axis and a joint that adjusts an angle with respect to the vertical axis.

21. (Currently Amended) An apparatus for executing an operation in a pressure vessel of a nuclear reactor, comprising:

a fully-immersionable body capable of being suspended and lowered into the vessel during the operation;

a tool attached to the body for at least one of repairing and inspecting an interior of a pump in the pressure vessel;

a guide capable of being inclined with respect to a vertical axis of the body when the body is suspended, wherein the guide is movably supported at a lower portion of the body so that the guide is inserted into the pump along a tapering surface of an opening in the pump when the body is suspended and lowered in the pressure vessel to adaptively vary the orientation of the guide in order to correspond to an interior surface of the pump as insertion proceeds.

22. (Previously Presented) An apparatus for executing an operation in a vessel of a nuclear reactor according to claim 21,

wherein the guide is freely supported at the lower portion of the body and inclined at a predetermined angle with respect to the vertical axis due to gravitational force.

23. (Previously Presented) An apparatus for executing an operation in a vessel of a nuclear reactor according to claim 21,

wherein the guide is biased to return to a predetermined angle with respect to the body.

24. (Withdrawn) An apparatus for executing an operation in a vessel of a nuclear reactor according to claim 21,

wherein an angle between the guide and the body is adjustable.

25. (Withdrawn) An apparatus for executing an operation in a vessel of a nuclear reactor according to claim 21,

wherein the tool commonly serves as the guide.

26. (Withdrawn) An apparatus for executing an operation in a vessel of a nuclear reactor according to claim 21, wherein the body includes:

at least 3 members interconnected by joints, at least one of the joints being at least one of a rotational joint and a bending joint; and

a plurality of extendable supports capable of stabilizing the body against a first plurality of interior surfaces of the pump.

27. (Withdrawn) An apparatus for executing an operation in a vessel of a nuclear reactor according to claim 21 further comprising:

a first plurality of extendable supports attached to the body and capable of stabilizing the body against a first plurality of interior surfaces of the pump.

28. (Withdrawn) An apparatus for executing an operation in a vessel of a nuclear reactor according to claim 27 further comprising:

a second plurality of extendable supports attached to the body and capable of stabilizing the body against a second plurality of interior surfaces of the pump.

29. (Withdrawn) An apparatus for executing an operation in a vessel of a nuclear reactor according to claim 21 wherein,

the body includes a plurality of joints, the joints including a joint that rotates around the vertical axis and a joint that adjusts an angle with respect to the vertical axis.